

### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### Listing of the Claims:

1. (Currently Amended) A hearing prosthesis system comprising:

a first housing containing a primary signal processor configured to receive signals output by a microphone; and

a plurality of second housings, each configured to removably connect to the first ~~housing;~~ housing, wherein each ~~at least one~~ of said second housings has a different mechanism user interface configured to allow user control of one or more features of the operation of the primary signal processor.

2. (Cancelled)

3. (Currently Amended) The hearing prosthesis system of claim 1, wherein the mechanism of one or more of said plurality of second housings contains a power supply and has comprises a user interface disposed on the one of the second housings, wherein the user interface comprises mechanical controls, configured to allow user control of one or more features of the primary signal processor.

4. (Currently Amended) The hearing prosthesis system of claim 1, further comprising:

a remote module comprising a user interface, wherein one of said second housings is part of a connector unit including one of said plurality of second housings and configured to communicate, via an electrically conducting lead, with a remote the remote module, and wherein said mechanism of said one of said second housings is configured to allow user control of the one or more features of the operation of the primary signal processor with the remote module. ~~housing a power supply.~~

5. (Currently Amended) The hearing prosthesis system of claim 1, wherein ~~one or more of said plurality of second housings is configured to communicate, via an electrically conducting lead, with a~~ said remote module including comprises a user interface.

6-7. (Cancelled)

8. (Currently Amended) The hearing prosthesis system of claim 1, further comprising:  
a remote module comprising a user interface, wherein said mechanism of one of said second housings comprises ~~wherein one or more of said plurality of second housings contains~~ signal receiver circuitry configured to wirelessly receive signals from ~~a remote~~ said remote module having a user interface.

9. (Cancelled)

10. (Currently Amended) The hearing prosthesis system of ~~claim 8~~ claim 1, wherein the second housing contains a power source.

11. (Previously Presented) The hearing prosthesis system of claim 8 wherein the remote module houses signal transmission circuitry configured to provide radio frequency signals to the second housing in response to adjustments made to the user interface.

12. (Currently Amended) The hearing prosthesis system of claim 1, further comprising:  
a remote module comprising a user interface, wherein said mechanism of one of said second housings comprises ~~claim 8 wherein the signal receiver circuitry is a signal~~ transceiver configured to wirelessly receive and wirelessly send signals from and to ~~a remote~~ said remote module having a user interface.

13-21. (Cancelled)

22. (Previously Presented) The hearing prosthesis system of claim 4 wherein the remote module has a visual display.

23-26. (Cancelled)

27. (Currently Amended) The hearing prosthesis system ~~of any one of claim 1~~ of claim 68, wherein the user interface comprises at least one of a push button, a switch and a rotary control.

28-32. (Cancelled)

33. (Currently Amended) The hearing prosthesis system of ~~claim 1~~ claim 68, wherein the user interface comprises a ~~first~~ three-position switch ~~configured to allow a user to select a speech program, a dial configured to allow a user to adjust the volume and sensitivity of the primary signal processor, and a second three position switch configured to allow a user to specify whether the primary signal processor is to receive input from the microphone, a telecoil, or a mixture of inputs.~~

34-36. (Cancelled)

37. (Currently Amended) The hearing prosthesis system of claim 1, wherein, when the first housing is removably connected to any one of the second housings, wherein at least the connected first and second housings ~~housing and the second housing~~ are configured to be worn on the ear of the recipient.

38. (Previously Presented) The hearing prosthesis system of claim 1, wherein the hearing prosthesis system is a cochlear implant system.

39. (Currently Amended) A hearing prosthesis comprising:

a first housing containing a primary signal processor configured to receive signals output by a ~~microphone; and a second housing configured to removably connect to the first housing; and~~ microphone, wherein the first housing is configured to removably connect to each of a plurality of second housings each having a different mechanism configured a user interface mounted to the second housing and to allow user control of one or more features of the operation of the primary signal processor.

40. (Currently Amended) The hearing prosthesis of claim 39 wherein at least one of the second housings ~~housing~~ contains a power supply.

41-45. (Cancelled)

46. (Currently Amended) The hearing prosthesis of ~~claim 41~~ claim 73, wherein the first housing comprises a user interface, and wherein the hearing prosthesis is configured to render the user interface ~~mounted to the second housing~~ partially or fully inoperable ~~when the remote module is used in conjunction with the second housing of the hearing prosthesis.~~

47. (Currently Amended) The hearing prosthesis of ~~claim 42~~ claim 46, wherein the ~~further~~ user interface ~~configured to be~~ is removably mounted to ~~either the remote module or the second~~ first housing.

48-50. (Cancelled)

51. (Currently Amended) A hearing prosthesis comprising:

a first housing containing a primary signal processor configured to receive signals output by a ~~microphone; a second housing~~ microphone, wherein the first housing is configured to removably connect to each of a plurality of second housings each having a different mechanism configured ~~the first housing; a remote module configured to communicate with circuitry contained in the second housing and including a user interface configured to allow user control of one or more features of the operation of the primary signal processor, wherein a first one of the mechanisms is configured to enable a remote module to communicate with the primary signal processor.~~

52-63. (Cancelled)

64. (Previously Presented) The hearing prosthesis of claim 39, wherein the hearing prosthesis is a cochlear implant.

65. (Currently Amended) A speech processing unit of a hearing prosthesis, the speech processing unit comprising:

a first component configured to be worn behind an ear of a recipient, the first component including a signal processor configured to perform signal processing functions, ~~functions~~; and configured to removably connect to any one of a plurality of second component configured to removably connect to the first component, the second component including a user interface components each having a different mechanism configured to allow user control of one or more operations of ~~communicate with the signal processor.~~

66. (Currently Amended) A hearing prosthesis system ~~speech processing unit of a cochlear implant, the speech processing unit~~ comprising:

a first component ~~configured to be worn behind an ear of a recipient, the first component~~ including a signal processor configured to perform signal processing functions;  
a remote module; and

a plurality of second components, each component configured to removably connect to the first component, wherein each of the second components component including a battery compartment and a user interface has a different mechanism configured to allow user control of one or more features of the operation of ~~communicate with~~ the signal processor, wherein a first one of the mechanisms comprises a user interface disposed on one of the second components and a second one of the mechanisms comprises circuitry configured to receive signals from the remote module.

67. (Cancelled)

68. (New) The hearing prosthesis system of claim 3, wherein the user interface comprises at least one mechanical control.

69. (New) The hearing prosthesis system of claim 1, wherein the mechanism of one of said second housings comprises a user interface disposed on the one of the second housings, wherein the user interface comprises mechanical controls and a visual display.

70. (New) The hearing prosthesis of claim 39, wherein the mechanism of one of the second housings comprises a user interface disposed on the one of the second housings, wherein the user interface comprises mechanical controls.

71. (New) The hearing prosthesis of claim 39, wherein the mechanism of one of the second housings comprises a user interface disposed on the one of the second housings, wherein the user interface comprises mechanical controls and a visual display.

72. (New) The hearing prosthesis of claim 39, wherein the mechanism of one of the second housings is configured to allow user control of the one or more features of the operation of the primary signal processor with a remote module configured to communicate with the one of the second housings via an electrically conducting lead.

73. (New) The hearing prosthesis of claim 39, wherein the mechanism of one of the second housings comprises signal receiver circuitry configured to wirelessly receive signals from a remote module comprising a user interface.

74. (New) The hearing prosthesis of claim 39, wherein the mechanism of one of the second housings comprises a signal transceiver configured to wirelessly receive and wirelessly send signals from and to a remote module comprising a user interface.

75. (New) The hearing prosthesis of claim 51, wherein a second one of the mechanisms comprises a user interface disposed on the one of the second housings, wherein the user interface comprises mechanical controls.

76. (New) The hearing prosthesis of claim 51, wherein a second one of the mechanisms comprises a user interface disposed on the one of the second housings, wherein the user interface comprises mechanical controls and a visual display.

77. (New) The hearing prosthesis of claim 51, wherein the remote module is configured to communicate with the first one of the second housings via an electrically conducting lead.

78. (New) The hearing prosthesis of claim 51, wherein the first one of the mechanisms comprises signal receiver circuitry configured to wirelessly receive signals from the remote module comprising a user interface.

79. (New) The hearing prosthesis of claim 51, wherein the first one of the mechanisms comprises a signal transceiver configured to wirelessly receive and wirelessly send signals from and to the remote module.

80. (New) The speech processing unit of claim 65, wherein the mechanism of one of the second components comprises a user interface disposed on the one of the second components, wherein the user interface comprises mechanical controls.

81. (New) The speech processing unit of claim 65, wherein the mechanism of one of the second components comprises a user interface disposed on the one of the second components, wherein the user interface comprises mechanical controls and a visual display.

82. (New) The speech processing unit of claim 65, wherein the mechanism of one of the second components is configured to allow user control of the one or more features of the operation of the primary signal processor with a remote module configured to communicate with the one of the second housings via an electrically conducting lead.

83. (New) The speech processing unit of claim 65, wherein the mechanism of one of the second components comprises signal receiver circuitry configured to wirelessly receive signals from a remote module comprising a user interface.

84. (New) The speech processing unit of claim 65, wherein the mechanism of one of the second components comprises a signal transceiver configured to wirelessly receive and wirelessly send signals from and to a remote module comprising a user interface.



85. (New) The speech processing unit of claim 66, wherein the user interface comprises mechanical controls.

86. (New) The speech processing unit of claim 85, wherein the user interface comprises a visual display.

87. (New) The speech processing unit of claim 66, wherein the remote module is configured to communicate with the second one of the second components via an electrically conducting lead.

88. (New) The hearing prosthesis system of claim 66, wherein the circuitry of the second one of the mechanisms comprises signal receiver circuitry configured to wirelessly receive signals from the remote module.

89. (New) The speech processing unit of claim 66, wherein the circuitry of the second one of the mechanisms comprises signal transceiver configured to wirelessly receive and wirelessly send signals from and to the remote module.